

WHAT IS CLAIMED IS:

1. A piezoelectric ceramic body comprising a plurality of piezoelectric material particles and dielectric particles comprising a dielectric material having a higher dielectric constant than said piezoelectric material, the dielectric disposed in gaps between the piezoelectric particles.
2. A piezoelectric ceramic body according to Claim 1, wherein the piezoelectric material is at least one member of the group consisting of lead titanate zirconate, lead titanate, lead titanate zirconate containing a composite perovskite compound as a solid solution therein, and lead titanate containing a composite perovskite compound as a solid solution therein.
3. A piezoelectric ceramic body according to Claim 2, wherein the dielectric material is at least one member of the group consisting of a composite perovskite compound, a solid solution of a composite perovskite compound and lead titanate, and the combination of a dielectric constant enhancement oxide and a piezoelectric material.
4. A piezoelectric ceramic body according to Claim 3, wherein the dielectric powder has a particle size which is not more than about 1/4 of the particle size of the piezoelectric powder.
5. A piezoelectric ceramic body according to Claim 4, wherein the dielectric powder content does not exceed about 3 weight parts per 100 weight parts of the piezoelectric powder.
6. A piezoelectric ceramic body according to Claim 5, wherein the body has an outer surface with an electrode thereon.
7. A piezoelectric ceramic body according to Claim 1, wherein the dielectric material is at least one member of the group consisting of a composite perovskite compound, a solid solution of a composite perovskite compound and lead

titanate, and the combination of a dielectric constant enhancement oxide and a piezoelectric material.

8. A piezoelectric ceramic body according to Claim 1, wherein the dielectric powder has a particle size which is not more than about 1/4 of the particle size of the piezoelectric powder.

9. A piezoelectric ceramic body according to Claim 1, wherein the 5 dielectric powder content does not exceed about 3 weight parts per 100 weight parts of the piezoelectric powder.

10. A piezoelectric ceramic body according to Claim 1, wherein the body has an outer surface with an electrode thereon.

11. A method of producing a piezoelectric ceramic comprising:
10 providing a body of predetermined shape comprising a mixture of calcined piezoelectric material powder and calcined dielectric material powder, wherein said dielectric material has a higher dielectric constant than said piezoelectric material; and

15 firing the formed piece, so that a sintered piece as a piezoelectric ceramic is produced.

12. A method of producing a piezoelectric ceramic according to claim 11, further comprising forming said mixture into said predetermined shape.

13. A method of producing a piezoelectric ceramic according to claim 12, further comprising forming said mixture.

14. A method of producing a piezoelectric ceramic according to Claim 11, wherein the calcined dielectric material powder has a particle size which is not more 5 than about one fourth of the particle size of the calcined piezoelectric material powder.

15. A method of producing a piezoelectric ceramic according to Claim 11, wherein the calcined dielectric material powder is present in an amount of not more than about 3 parts by weight based on 100 parts by weight of the calcined piezoelectric material powder.

10 16. A method of producing a piezoelectric ceramic comprising:
 providing a calcined piezoelectric material powder;
 providing a calcined dielectric material powder, wherein said dielectric material has a higher dielectric constant than said piezoelectric material;
 mixing the calcined piezoelectric material powder with the
15 calcined dielectric material powder I, so that mixed powder is produced;
 forming the mixed powder into a predetermined shape, so that a formed piece is produced; and
 firing the formed piece, so that a sintered piece as a piezoelectric ceramic is produced.

17. A method of producing a piezoelectric ceramic according to Claim 16, wherein the calcined dielectric material powder has a particle size which is not more than about one fourth of the particle size of the calcined piezoelectric material powder.

18. A method of producing a piezoelectric ceramic according to Claim 17, wherein the calcined dielectric material powder is mixed with the calcined piezoelectric material powder in an amount not more than about 3 parts by weight based on 100 parts by weight of the calcined piezoelectric material powder.